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09/813,348	03/21/2001	Yoshihito Asao	Q63175	3466

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SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
WASHINGTON, DC 20037-3213

EXAMINER

GONZALEZ, JULIO C

ART UNIT	PAPER NUMBER
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2834

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Please find below and/or attached an Office communication concerning this application or proceeding.



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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 18

Application Number: 09/813,348
Filing Date: March 21, 2001
Appellant(s): ASAO ET AL.

Christopher R. Lipp
Registration No. 41,157
For Appellant

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GROUP 2800

EXAMINER'S ANSWER

This is in response to the appeal brief filed 12/11/02.

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

The amendment after final rejection filed on 10/11/02 has not been entered.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

Appellant's brief includes a statement that claims 1-11 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

5,418,401	KANEYUKI	5-1995
5,930,134	GLENNON	7-1999
5,719,484	TANIGUCHI ET AL	2-1998
5,726,559	TANIGUCHI ET AL	3-1998

(10) Grounds of Rejection

Claim Rejections - 35 USC § 112

The 112 rejection has been withdrawn.

Claim Rejections - 35 USC § 103

(a) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

(b) Claims 1, 3 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneyuki in view of Glennon.

Kaneyuki discloses a power supply system for a vehicle having an alternator 1 with armature winding 2, field coil 3, a load 11, a battery 10, a voltage control means 8 and a control means 20 and a step-down DC/DC converter 14 (see figure 1), which output the voltage to a battery (column 2, lines 30-38).

However, Kaneyuki does not disclose the use of step-up DC/DC converter.

On the other hand, Glennon discloses for the purpose of improving the reliability of prime movers that it is well known in the art of prime movers to step up the voltage of a battery using a step-up DC/DC converter and apply the voltage to the field coils (column 1, lines 25-29 & figures 1, 3).

(c) Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneyuki and Glennon as applied to claim 1 above, and further in view of Taniguchi et al (Patent No. 5,719,484).

The combined prime mover discloses all of the elements above. However, the combined invention fails to disclose a specific power factor.

On the other hand, Taniguchi et al discloses for the purpose of creating sufficient power when the load increases and increase the magnetic flux in the armature winding that the voltage factor can be of 1.2 to 2.0 (see claim 4).

(d) Claims 4-6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneyuki and Glennon as applied to claims 1 and 8 above, and further in view of Taniguchi et al (Patent No. 5,726,559).

The combined prime mover discloses all of the elements above. However, the combined invention fails to disclose sensing the temperature of the coil for controlling the power supply system.

On the other hand, Taniguchi et al discloses for the purpose of restraining increase in rotor temperature, means for reducing the temperature of the winding thus controlling the current based on the rotational speed detected (column 1, lines 48-53 & lines 58-62). Also, Taniguchi discloses using a rotational detector (see claim 1).

(11) Response to Argument

(a) Applicant's arguments filed 12/11/02 have been fully considered but they are not persuasive.

Kaneyuki discloses an electrical power supply system for an automotive vehicle having armature winding 2 and a field coil 3 (see figure 1), a voltage control means 8, a load 13 and a battery 12. Also, Kaneyuki discloses that the power converter reduces the output voltage of the alternator for charging a battery (column 2, lines 30-38). Also, Kaneyuki teaches that it is well known in the art to use a certain voltage and applied it to the field winding (column 3, lines 19-28). Moreover, as disclosed in the claims, the voltage is applied to the field coil. Kaneyuki teaches that by controlling the voltage supplied to the field winding, the electrical output of an alternator can be controlled (see figure 4 & column 5, lines 30-43). Even more, Kaneyuki teaches that by stopping the flow of current (voltage – Ohm's Law) through the field winding 3, the output voltage can be controlled (column 3, lines 37, 38, 48, 49). Kaneyuki further discloses that by controlling the current (voltage – Ohm's law), specifically, applied to the field winding, the output voltage can be controlled (column 8, lines 14-17, 32-38) to obtain different voltage level, depending on the need (column 8, lines 39-42).

As shown by Kaneyuki, it is well known in the art to applied a desire voltage to the field coil of an alternator.

Glennon on the other part shows that it is known for power electronics to include a step-up converter to step up the voltage from 28 volts to 150 volts and that such voltage may be supplied to the armature coils, an exciter and a field winding (column 1, lines 24-28). Also, as disclosed from the claims, the claims are not specific enough as to differentiate between the field coil and an armature coil since an armature coil may be also a field coil since no physical description is given of any of both components or what differentiates one from the other, as far as voltage controlling purposes is concern. Moreover, Glennon teaches that a step up inverter may be controlled (column 4, lines 14-16) and that the armature winding and the field winding are link directly (see figure 2 & column 3, lines 56- column 4, line 6). From figure 2, it is shown that as a stepped voltage may be supplied to the armature winding, such voltage would be also supplied to the field coil (field winding) 48 and it is disclosed that the rectifier 50 and the field winding (field coil) 48 are interconnected (column 3, line 65- column 4, line 6). As shown, Kaneyuki teaches that a desired voltage may be applied to the field coil and Glennon also teaches that voltage may be applied to the field coil (field winding), more specifically, stepped-up voltage.

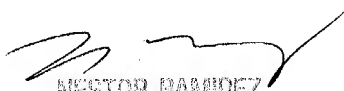
(b) In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the control unit detecting an on/off state of a switch for supplying power to a load, the output voltage of the alternator been switched to a low charging voltage, a regulator operating a voltage controller for controlling the field current) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

For the above reasons, it is believed that the rejections should be sustained.

Application/Control Number: 09/813,348
Art Unit: 2834

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Respectfully submitted,


NESTOR RAMIREZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

Jcg

February 20, 2003

Conferees

Julio Gonzalez (Examiner AU 2834)

Nestor Ramirez (SPE - AU 2834) *NR*

Olik Chaudhuri (SPE - 2823) *OC*

SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLL
2100 PENNSYLVANIA AVENUE, N.W.
WASHINGTON, DC 20037-3213